

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P321398

Luminaire Tested: **GAN-SA4B-827-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA4B-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13678 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

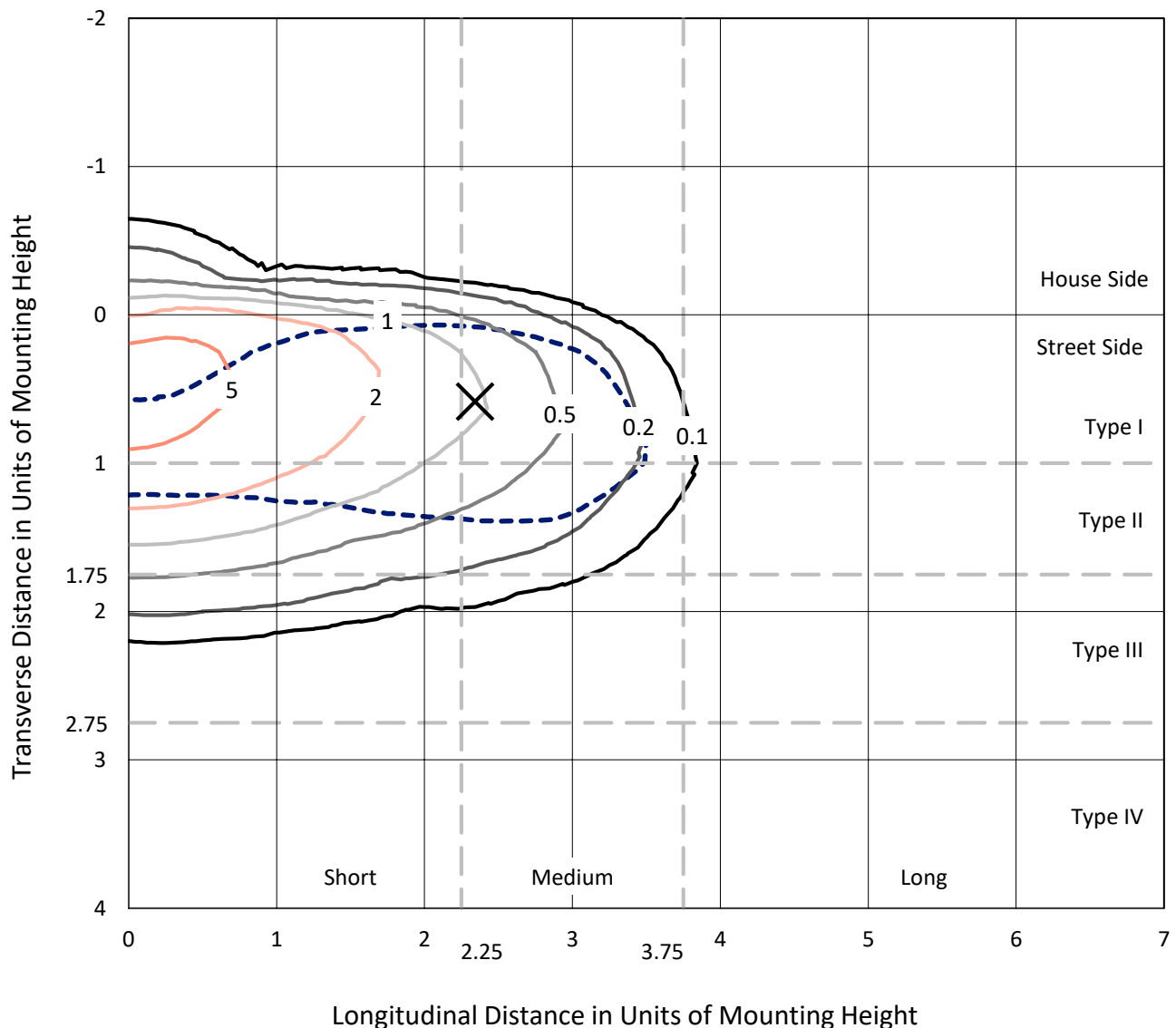
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321398
 CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

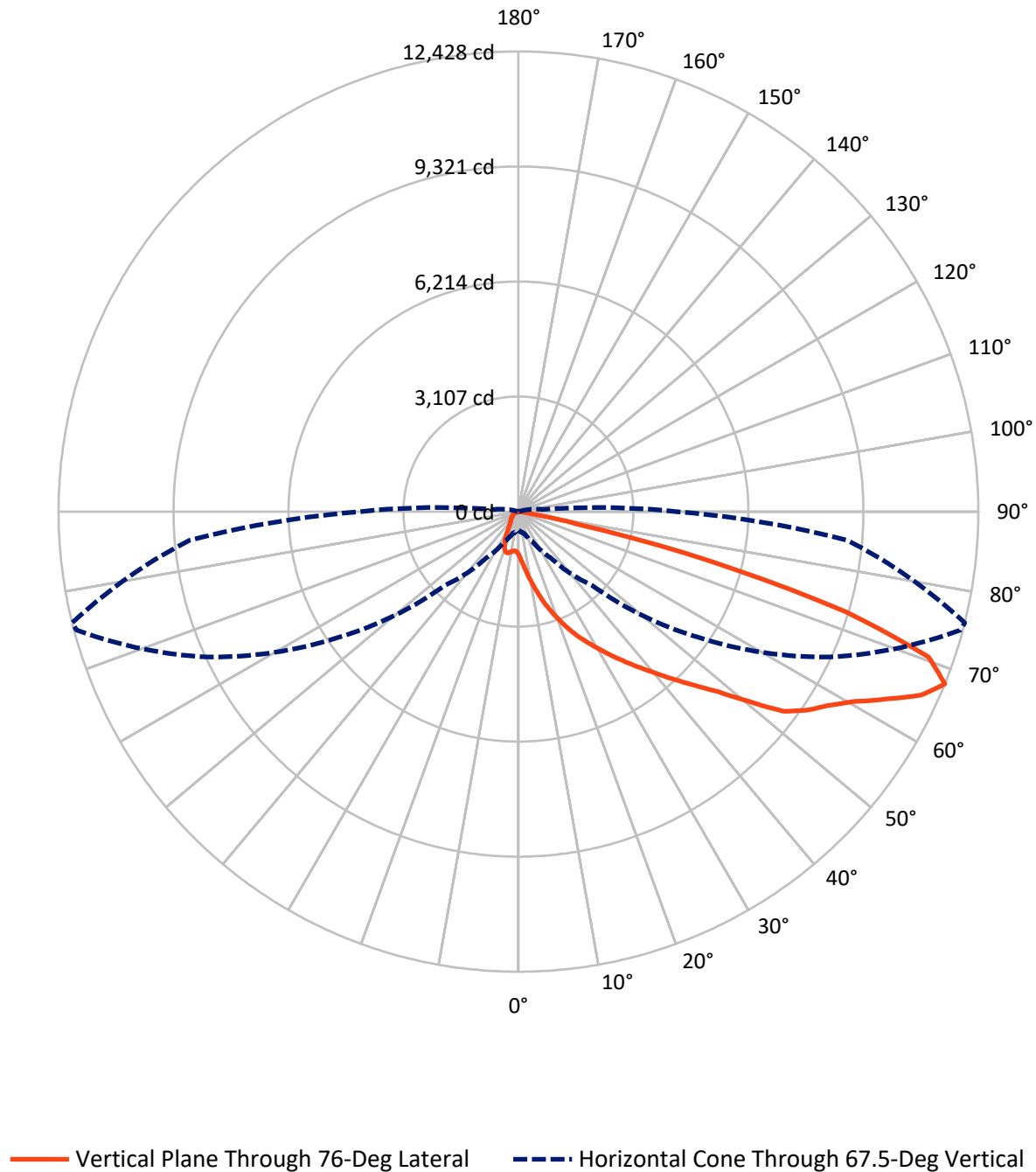
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P321398
CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P321398

CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

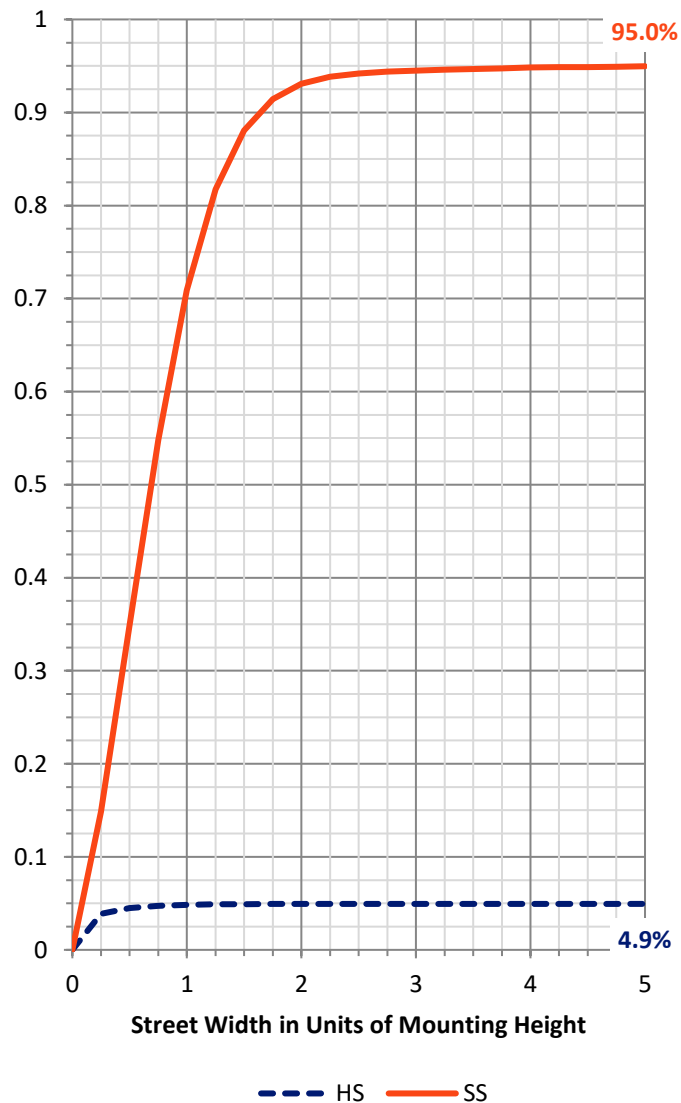
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	679.2	0.0	679.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	12998.8	0.0	12998.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	13678.0	0.0	13678.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	1.1
10°-20°	571.9	4.2
20°-30°	1163.7	8.5
30°-40°	2019.9	14.8
40°-50°	2853.8	20.9
50°-60°	3236.3	23.7
60°-70°	2684.2	19.6
70°-80°	972.3	7.1
80°-90°	31.5	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13678.0	100.0
0°-180°	13678.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321398

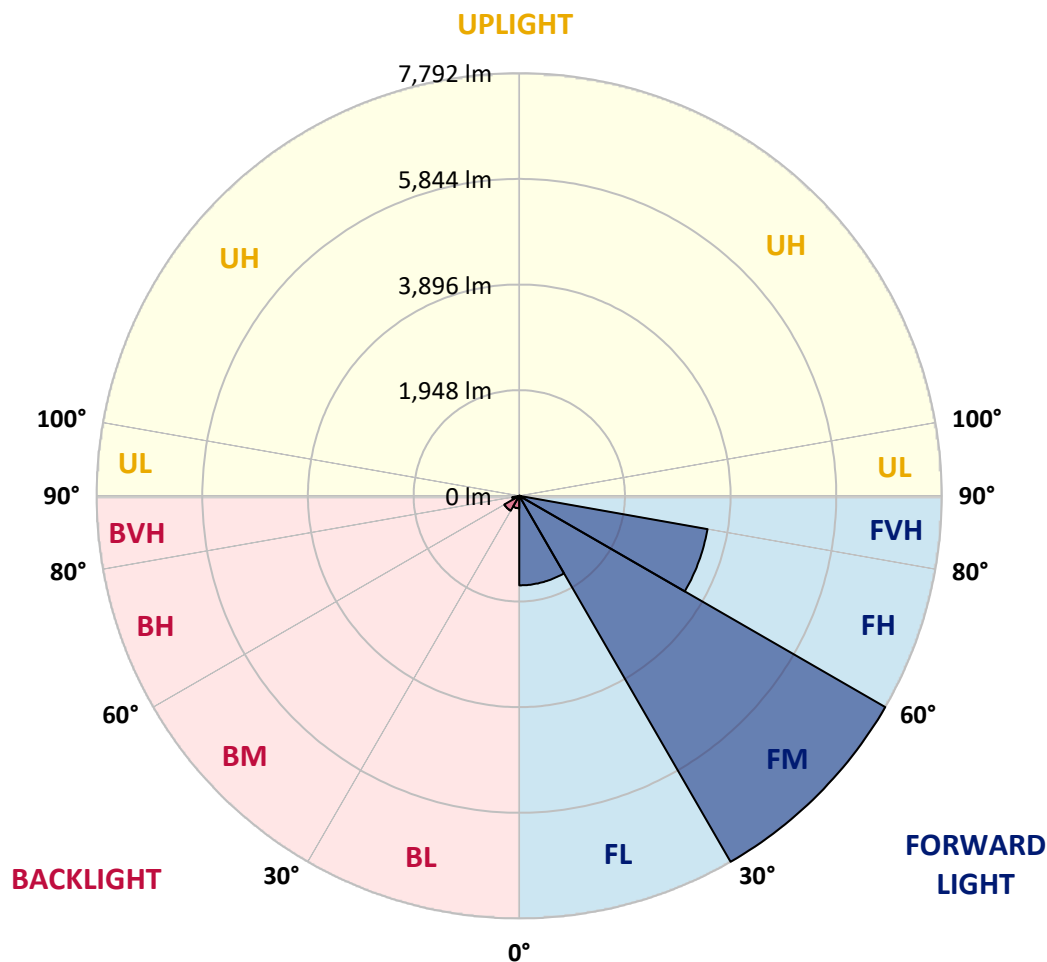
CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1650.9	12.1			
FM	(30°-60°)	7792.1	57.0			
FH	(60°-80°)	3525.3	25.8			G2/5000
FVH	(80°-90°)	30.5	0.2			G1/100
BL	(0°-30°)	229.1	1.7	B1/500		
BM	(30°-60°)	317.9	2.3	B1/1000		
BH	(60°-80°)	131.3	1.0	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





REPORT NUMBER: P321398

CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3
2.5°	1732.0	1693.1	1702.1	1676.9	1631.4	1537.9	1458.2	1382.6	1294.5	1291.5	1219.0
5°	2335.6	2302.6	2298.4	2247.5	2164.8	2005.9	1851.3	1675.1	1478.5	1464.1	1310.1
7.5°	2883.3	2857.0	2847.4	2786.9	2632.8	2478.2	2276.8	2017.9	1710.5	1684.1	1433.0
10°	3304.1	3291.5	3293.9	3250.7	3118.9	2975.0	2710.7	2380.5	1973.6	1932.8	1580.4
12.5°	3622.9	3625.9	3647.5	3621.1	3547.4	3440.7	3158.4	2767.1	2264.8	2209.1	1748.8
15°	3857.2	3872.2	3911.8	3944.7	3939.4	3847.1	3588.2	3159.6	2574.1	2512.4	1936.4
17.5°	4008.9	4025.7	4083.2	4156.3	4223.4	4201.9	4002.9	3538.4	2886.9	2815.6	2137.2
20°	4141.9	4161.7	4223.4	4319.9	4445.2	4472.2	4341.5	3905.8	3199.2	3112.3	2344.6
22.5°	4430.2	4429.6	4467.4	4523.7	4643.0	4712.5	4629.8	4246.8	3507.8	3417.3	2556.1
25°	4951.6	4931.8	4918.6	4874.3	4900.7	4943.8	4897.7	4565.6	3818.3	3726.6	2770.7
27.5°	5571.3	5583.3	5476.6	5357.4	5265.1	5220.7	5145.2	4861.1	4116.8	4016.1	2980.4
30°	6225.2	6228.8	6102.9	5950.7	5747.5	5579.1	5448.5	5143.4	4423.6	4313.9	3184.2
32.5°	6814.9	6791.5	6666.9	6459.5	6203.0	6013.6	5742.1	5458.6	4748.4	4642.4	3410.8
35°	7282.4	7254.8	7103.2	6914.4	6648.3	6457.7	6131.1	5773.3	5090.1	4986.4	3637.9
37.5°	7624.0	7591.6	7435.8	7241.6	7012.1	6901.2	6582.4	6115.5	5462.8	5351.4	3877.0
40°	7742.7	7714.5	7616.8	7474.8	7290.2	7265.0	7061.2	6509.3	5868.6	5749.9	4147.9
42.5°	7671.9	7644.4	7609.6	7561.7	7485.0	7508.9	7513.1	6958.1	6319.3	6202.4	4447.0
45°	7391.5	7366.9	7402.8	7473.0	7568.3	7686.9	7925.5	7440.6	6822.7	6698.0	4792.8
47.5°	6978.5	6960.5	7060.0	7235.0	7513.7	7841.0	8302.4	7947.6	7387.9	7272.2	5224.3
50°	6391.2	6388.2	6587.2	6906.6	7335.1	7915.3	8692.0	8524.2	8173.0	8051.3	5824.2
52.5°	5476.6	5482.6	5874.0	6385.2	7021.7	7864.9	8942.5	9264.9	9086.3	8959.9	6343.8
55°	4605.8	4641.8	4919.2	5656.4	6541.0	7677.9	9028.8	9610.8	9590.4	9470.5	6632.7
57.5°	3753.0	3818.3	4085.6	4774.2	5839.2	7247.0	8981.5	9760.6	9965.6	9873.9	7013.9
60°	2828.8	2858.8	3166.8	3810.5	4938.4	6460.7	8638.1	9842.1	10478.6	10415.0	7567.1
62.5°	1799.8	1874.7	2148.0	2768.9	3845.3	5368.7	8059.1	9840.9	11120.4	11155.2	8280.9
65°	948.1	1035.6	1180.7	1715.9	2642.4	4149.1	7188.3	9748.6	11908.0	11956.5	8838.8
67.5°	511.2	536.4	613.1	890.6	1532.5	2810.8	5908.7	9293.1	12364.0	12428.2	8916.7
70°	374.0	387.8	416.5	492.6	771.3	1632.6	4311.5	8260.5	11776.1	11752.1	7922.5
72.5°	287.1	308.7	330.2	360.8	443.5	871.4	2684.4	6468.5	9396.2	9238.0	5921.9
75°	226.5	230.1	260.7	288.3	332.6	496.2	1192.1	3767.3	5734.9	5360.4	3070.9
77.5°	181.0	183.4	201.4	225.3	267.3	326.0	369.2	1482.1	1830.9	1633.8	666.4
80°	107.3	113.3	149.8	173.8	221.7	205.6	134.8	321.8	285.9	258.9	112.1
82.5°	59.9	64.7	84.5	137.2	154.6	98.3	67.1	86.9	67.1	65.3	31.8
85°	0.0	3.0	54.5	85.1	62.9	21.6	28.2	28.8	19.8	18.6	12.6
87.5°	0.0	0.0	16.8	16.2	2.4	3.6	6.6	9.6	7.8	7.8	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P321398

CATALOG NUMBER: GAN-SA4B-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3	1160.3
2.5°	1183.1	1150.7	1089.6	1029.6	979.3	937.9	900.8	885.8	873.8	872.0	862.4
5°	1235.8	1170.5	1053.6	957.7	893.6	848.0	809.1	785.1	766.5	759.3	752.8
7.5°	1315.5	1216.6	1048.8	938.5	861.8	785.1	713.2	635.3	586.7	568.2	557.4
10°	1412.6	1277.8	1066.8	933.1	798.9	637.1	517.8	418.9	378.8	365.6	362.0
12.5°	1525.9	1353.9	1098.0	899.6	664.6	452.5	357.2	323.6	314.6	310.4	310.4
15°	1655.9	1437.2	1120.1	802.5	491.4	342.2	309.3	293.7	284.1	278.7	279.3
17.5°	1789.0	1518.7	1109.3	661.7	362.6	304.5	279.9	263.1	249.9	244.5	243.3
20°	1923.2	1594.2	1049.4	492.6	306.9	276.3	248.7	230.1	217.0	211.6	210.4
22.5°	2062.3	1658.3	943.9	361.4	275.7	245.1	218.2	199.6	187.0	182.2	179.8
25°	2197.7	1710.5	796.5	292.5	246.3	215.8	190.0	172.6	161.2	156.4	155.8
27.5°	2324.2	1743.4	625.7	258.3	220.6	189.4	166.0	150.4	140.8	137.2	136.6
30°	2438.0	1746.4	462.7	233.1	197.8	166.6	145.0	131.3	122.9	119.3	118.1
32.5°	2553.1	1721.3	336.8	210.4	176.8	146.8	125.9	115.1	109.1	106.1	106.1
35°	2661.6	1663.1	262.5	190.6	156.4	127.7	110.9	103.1	99.5	96.5	96.5
37.5°	2767.7	1579.8	222.9	173.2	137.2	111.5	97.7	92.9	89.9	86.9	86.9
40°	2875.6	1474.9	202.6	157.0	121.7	98.9	86.9	82.7	79.7	77.3	76.7
42.5°	3008.0	1353.9	189.4	142.0	107.9	87.5	76.7	71.9	69.5	67.1	65.9
45°	3161.4	1249.6	178.6	127.1	96.5	77.9	66.5	61.7	58.1	55.1	54.5
47.5°	3382.6	1174.1	164.2	110.9	85.7	67.7	57.5	52.1	46.7	43.8	43.2
50°	3664.9	1111.7	145.6	96.5	74.9	57.5	47.9	41.4	36.6	33.6	33.6
52.5°	3805.1	1030.2	128.9	83.9	62.9	48.5	39.0	31.2	28.8	25.8	25.8
55°	3861.4	967.9	112.1	71.3	52.1	40.2	30.6	24.0	22.2	20.4	19.8
57.5°	4019.7	949.9	97.7	60.5	43.2	31.8	23.4	18.0	16.8	14.4	14.4
60°	4274.4	958.9	84.5	51.5	34.8	24.6	17.4	13.8	12.6	10.2	10.2
62.5°	4549.5	947.5	71.3	44.3	27.0	18.0	12.0	10.2	10.2	6.0	5.4
65°	4602.2	843.8	61.1	36.6	21.0	13.2	7.8	6.6	9.0	1.2	0.0
67.5°	4271.4	654.5	52.7	28.2	15.6	10.2	6.0	3.0	7.8	0.0	0.0
70°	3415.5	415.9	42.6	20.4	12.0	8.4	4.8	1.2	6.0	0.0	0.0
72.5°	2415.3	241.5	33.6	14.4	10.2	6.6	3.6	0.0	3.6	0.0	0.0
75°	1221.4	128.9	21.0	10.8	7.8	4.8	2.4	0.0	0.6	0.0	0.0
77.5°	264.3	59.9	13.2	7.8	5.4	3.0	1.2	0.0	0.0	0.0	0.0
80°	57.5	26.4	8.4	4.8	3.0	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	21.0	13.8	4.2	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.4	7.2	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	2.4	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)